

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A ceramic heater comprising a heating element embedded in an insulating ceramic substrate, a leg of the heating element having an exposed surface which serves as a lead wire connection terminal, and a lead wire joined to a lead wire connection terminal via a brazing metal which is bonded directly to the lead wire connection terminal, wherein the brazing metal contains a predominant amount of copper and further contains Ti and Si as activation metals, each in an amount of 0.1-5% by mass of the brazing metal, wherein electrical continuity is established between the lead wire, lead wire connection terminal and heating element.

2. (original): The ceramic heater as claimed in claim 1, wherein the brazing metal contains copper in an amount of not less than 85% by mass.

Claims 3-6 (canceled).

7. (currently amended): The ceramic heater as claimed in claim 1, comprising a pad formed on the lead wire so as to serve as a joining surface to be joined to the lead wire connection terminal, the pad formed on the lead wire being joined to the lead wire connection terminal via the brazing metal provided between the pad and the lead wire connection terminal.

8. (original): The ceramic heater as claimed in claim 1, wherein the brazing metal joining the lead wire and the lead wire connection terminal is a layer having a thickness of 30-400 μm .

9. (original): The ceramic heater as claimed in claim 1, wherein the brazing metal joining the lead wire and the lead wire connection terminal is a layer having a thickness of 50-300 μm .

10. (original): The ceramic heater as claimed in claim 1, wherein the brazing metal joining the lead wire and the lead wire connection terminal is a layer having a thickness of 150-250 μm .

11. (original): The ceramic heater as claimed in claim 8, comprising an interjacent buffer plate formed of copper present in the layer of brazing metal joining the lead wire and the lead wire connection terminal, and the thickness of the layer of brazing metal includes that of the buffer plate formed of copper.

12. (original): The ceramic heater as claimed in claim 9, comprising an interjacent buffer plate formed of copper present in the layer of brazing metal joining the lead wire and the lead wire connection terminal, and the thickness of the layer of brazing metal includes that of the buffer plate formed of copper.

13. (original): The ceramic heater as claimed in claim 10, comprising an interjacent buffer plate formed of copper present in the layer of brazing metal joining the lead wire and the lead wire connection terminal, and the thickness of the layer of brazing metal includes that of the buffer plate formed of copper.

14. (previously presented): A ceramic heater comprising a heating element embedded in an insulating ceramic substrate, and a lead wire joined to a lead wire connection terminal via a brazing metal which contains a predominant amount of copper, wherein electrical continuity is established between the lead wire, lead wire connection terminal and heating element, wherein

the brazing metal joining the lead wire and the lead wire connection terminal is a layer having a thickness of 30-400 μm .

15. (previously presented): The ceramic heater as claimed in claim 14, wherein the brazing metal joining the lead wire and the lead wire connection terminal is a layer having a thickness of 50-300 μm .

16. (previously presented): The ceramic heater as claimed in claim 14, wherein the brazing metal joining the lead wire and the lead wire connection terminal is a layer having a thickness of 150-250 μm .

17. (previously presented): The ceramic heater as claimed in claim 14, comprising an interjacent buffer plate formed of copper present in the layer of brazing metal joining the lead wire and the lead wire connection terminal, and the thickness of the layer of brazing metal includes that of the buffer plate formed of copper.

18. (previously presented): The ceramic heater as claimed in claim 15, comprising an interjacent buffer plate formed of copper present in the layer of brazing metal joining the lead

wire and the lead wire connection terminal, and the thickness of the layer of brazing metal includes that of the buffer plate formed of copper.

19. (previously presented): The ceramic heater as claimed in claim 16, comprising an interjacent buffer plate formed of copper present in the layer of brazing metal joining the lead wire and the lead wire connection terminal, and the thickness of the layer of brazing metal includes that of the buffer plate formed of copper.